



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO.   |
|---|-------------|----------------------|---------------------|--------------------|
| 09/782,815  | 02/14/2001  | Rudolf Klingler      | 514413-3868         | 1724               |
| 20999   | 7590        | 01/29/2004           |                     | EXAMINER           |
| FROMMER LAWRENCE & HAUG<br>745 FIFTH AVENUE- 10TH FL.<br>NEW YORK, NY 10151 |             |                      |                     | HENDRICKS, KEITH D |
|   |             |                      | ART UNIT            | PAPER NUMBER       |
|   |             |                      | 1761                |                    |

DATE MAILED: 01/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                 |                 |
|------------------------------|-----------------|-----------------|
| <b>Office Action Summary</b> | Application No. | Applicant(s)    |
|                              | 09/782,815      | KLINGLER ET AL. |
|                              | Examiner        | Art Unit        |
|                              | Keith Hendricks | 1761            |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 01 December 2003.

2a) This action is **FINAL**.      2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 17-44 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 17-28 and 40-44 is/are rejected.

7) Claim(s) 29-39 is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. §§ 119 and 120

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some \* c) None of:

1. Certified copies of the priority documents have been received.

2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.

3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

13) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a)  The translation of the foreign language provisional application has been received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

#### Attachment(s)

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.

4) Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_.

5) Notice of Informal Patent Application (PTO-152)

6) Other: \_\_\_\_\_

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 42 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The phrase “wherein the starch has a maximum moisture content of about 15-20%” is unclear and indefinite. There are two conflicting ranges within this phrase, one implied (“maximum moisture”), with the other specifically recited (“about 15-20%”). The phrase “maximum moisture” necessitates both a maximum point and a minimum. As the minimum point would be zero, this would be below the range provided as “about 15-20%”. Such an overlap of ranges leaves the claim ambiguous and indefinite. Simply put, the “maximum moisture content” should be a single point, rather than a range. If the maximum moisture content were 20%, for example, it is unclear as to how it could also be within a range of “about 15-20%”. The rejected phrase thus also appears unnecessary.

Compare also claim 42 with claim 43.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

i) Claims 17-28 and 40-44 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Wimmer et al. (US PAT 2,894,859).

Wimmer et al. disclose an anhydrous method of producing acid-modified starch for use in the manufacture of gypsum wall board. The method comprises contacting raw granular starch or flour in a dry state with a gaseous anhydrous hydrogen chloride, or the acid may be applied as an aqueous solution in a fine spray (col. 4, ln. 15-27). The temperature range for treatment is stated to be 70°F-250°F (21°C-121°C), wherein “a mixing device equipped with a heat exchange surface, e.g., with a steam jacket and designed to minimize localized over-heating may be used” (col. 4, ln. 55-58). Following acidification, the mixture is neutralized by spraying with gaseous ammonia or other soda, soda ash type compounds, to raise the pH value into the range of 4-6 (col. 5). Various types of starch products may be utilized, including wheat, corn and potato (col. 3). Column 6, lines 21-27 states that the conversion process is accelerated by heating the acidified flour prior to neutralization, where “the disadvantage of the long holding period is overcome.” Example II discloses contacting the dry flour with the acid, and subsequently heating the mixture to 150°F. The heated product was held for 5 minutes, thus reading upon instant claim 21, for example. The product was cooled and then neutralized. Note that in example I, the product was neutralized during cooling in a mixer.

Thus, the instantly-claimed invention is anticipated by the reference. It is noted that starch flours inherently possess a low moisture content of well below 10%, and thus would the starting materials of the reference. Furthermore, claims reciting a starch from a “genetically modified plant” would not appear to differentiate from the starches disclosed by the reference. Initially, it is noted that many genetically modified plants do not alter the starch content in any way, thus providing the same starch as a “non-genetically modified plant.” Also, as cross-breeding and hybridization techniques were well-known in the art for centuries, these would constitute genetically modified plants and starches.

Alternatively, although the reference does not specifically provide data for the rate of heating in the step, it would have been obvious to one of ordinary skill in the art to have utilized known modes of heating to achieve the claimed method and product. This would not involve an inventive step. Furthermore, there does not appear to be any patentable distinction, difference or advantage to applicant’s claimed “heating the mixture at a rate of at least 3K/min”. Applicants have simply heated the product from the original room temperature of the mixture to the desired reaction temperature, using known techniques in the art. This was accomplished by the referenced method as well. Still further, no “duration of heating” is present in any of the instant claims, and thus this cannot be compared to the

Art Unit: 1761

teachings of the reference. Further, there is no support on the record that would lead one skilled in the art to believe that the rates of heating within the reference were not greater than 3 K/min. The reference provides data and information regarding the substance to be heated, the starting and finishing temperatures, duration of the heating, and mechanism means for heating.

### ***Claim Objections***

Claims 29-39 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. There is no specific teaching, suggestion or motivation in Wimmer et al. to use the modified starch product within food products. Other similar methods and/or products disclosed in the art (see for example, US Patents 2,359,378 and 3,175,928, herein made of record) do not provide the suggestion to use such modified starches within food products.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Keith Hendricks whose telephone number is (571) 272-1401. The examiner can normally be reached on M-F (8:30am-6pm); First Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano can be reached on (571) 272-1398. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-0987.



KEITH HENDRICKS  
PRIMARY EXAMINER